

REMARKS

The claims are claims 1, 5 to 7, 9 to 35, 38 to 39 and 41 to 46.

Claims 4, 47 and 48 are canceled. Claims 9, 12, 13, 29, 37, 39 and 46 have been amended. Claims 9, 12, 13 and 29 are amended to recite that the claimed functions are "to effect degradation of the signal quality." Claim 37 has been amended to incorporate limitations of canceled claim 48. Claims 39 and 46 have been amended to recite the initial transmission of the degraded signal quality version is without payment authorization.

Claims 1, 5 to 7, 9 to 35, 37 to 39 and 41 to 46 are rejected under 35 U.S.C. 103(a) as made obvious by the combination of Kaplan U.S. Patent No. 5,963,916 and Shan-Nazaroff et al U.S. Patent No. 6,091,857. The OFFICE ACTION states Kaplan shows all of the limitations of the claims except for specifying the degraded signal for the samples and how the digital signal is processed. The OFFICE ACTION further states at page 2, line 23 to page 3, line 7:

"Shah-Nazaroff et al. teaches, figure 5, a system and method for purchasing upgraded media features for programming transmissions. Figure 5 teaches the building of a client history which records the level of quality of a signal based on the price the client wishes to spend in order to increase profits by providing alternative quality products."

The OFFICE ACTION states "it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Kaplan system to select a defined quality level (degraded level) in order to increase profits by providing alternative quality products."

Claims 1, 35, 39, 42 and 43 recite subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claims 1 and 43 recite "a dialogue unit operable...to define a

degrade level signal dependent upon a client integrity indicator determined from a personal client file containing client history data stored in the file store." Claim 35 recites "defining a level of content degradation dependent on a client integrity indicator determined from a personal client file containing client history data." Claim 39 recites "the server defining a level of content degradation as a function of client history." Claim 42 recites "means for defining a level of content degradation as a function of client history." These recitations of claims 1, 35, 39, 42 and 43 serve as support for later recitations in each claim of output of a signal degraded corresponding to the defined degrade level signal or the level of content degradation. The OFFICE ACTION points to no disclosure of Kaplan or Shah-Nazaroff et al as defining a level of content degradation dependent upon a client history. Nothing in Kaplan or Shah-Nazaroff et al teaches that the transmission quality level is dependent upon a client history. Figure 5 of Shah-Nazaroff et al and the corresponding text at column 6, lines 16 to 48 describes delivering varying quality signals based upon varying payment authorization. This portion of Shah-Nazaroff et al does not condition signal quality on signal on client history as recited in claims 1, 35, 39, 42 and 43. Accordingly, claims 1, 35, 39, 42 and 43 are allowable over Kaplan and Shah-Nazaroff et al.

Claims 39, 41 and 46 recite subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claims 39, 41 and 46 each recite both "transmitting to the client a degraded evaluation version of the selected product without payment authorization, the degraded evaluation version of the selected product having a degraded perceived quality" and "transmitting to the client a non-degraded version of the selected product." The combination of Kaplan and Shah-Nazaroff et al fails to make obvious the transmission of both a degraded evaluation version without payment authorization and a non-degraded version of the selected

product following payment authorization. Neither Kaplan nor Shah-Nazaroff et al include any teachings why supplying the same selected product in degraded and non-degraded versions is advantageous. The OFFICE ACTION fails to point out where either Kaplan or Shah-Nazaroff et al makes obvious these limitations of claims 39, 41 and 46. The portion of Shah-Nazaroff et al cited by the Examiner teaches delivery of varying signal quality dependent upon varying payment levels. This fails to teach delivery of a degraded evaluation versions without payment authorization. Accordingly, claims 39, 41 and 46 are allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 37 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 37 recites "defining at the server a level of content degradation as a function of the identified type of payment authorization." This limitation is not taught in the combination of Kaplan and Shah-Nazaroff et al. Figure 5 and the corresponding text of Shah-Nazaroff et al teach only a single type of payment authorization. This application teaches various payment types at page 10, lines 16 to 19. Accordingly, claim 37 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

This application states at page 3, lines 16 to 23:

"It is therefore possible for a content provider to change the characteristics of an audio or video data stream supplied over a network or other public communications system to a potential purchaser by degrading it in a controlled and variable manner. The amount of degradation is preferably sufficient to enable a potential purchaser to appreciate the characteristics of the audio or video product, whilst reducing the perceived quality. In addition, the changes to the characteristics of the audio or video data stream are preferably such that the original high-fidelity product cannot be reconstructed from the low-fidelity pre-purchase sample."

This goal of the degradation is to enable the customer to sample the product without serving as a substitute for the product and so compromising future purchases (see application at page 1, lines 26 and 27). Shah-Nazaroff et al teaches selection of quality level dependent upon payment level. The goal of this application differs from and is unobvious over the teachings of Shah-Nazaroff et al. In this invention the signal quality is selected to enable sampling of the product without substituting for the product. Accordingly, the Shah-Nazaroff et al teaching of selecting a quality to conserve bandwidth fails to make obvious the degradation recited in claims 1, 35, 39, 41, 42 and 43.

Claim 6 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 6 recites "noise insertion circuitry for manipulating bits of the bit stream to degrade signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited noise insertion to degrade signal quality. Accordingly, claim 6 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 7 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 7 recites "the manipulation process applied by the frequency modulator is such as to effect a degradation of perceived signal quality in the digital audio/video signal reconstructed by the inverse digital Fourier transform unit." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited frequency modulation to degrade signal quality. Accordingly, claim 7 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 9 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 9 recites "the manipulation process includes one or more of the following:

frequency band rejections, frequency low pass and frequency high pass to effect a degradation of perceived signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited filtering to degrade signal quality. Accordingly, claim 9 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 10 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 10 recites "phase inversion over at least one range of frequencies." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited phase inversion to degrade signal quality. Accordingly, claim 10 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 11 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 11 recites the frequency modulator "inserts masked sound contributions adjacent amplitude peaks of the frequency domain representation of the digital audio signal." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited insertion of masked sound contributions adjacent amplitude peaks to degrade signal quality. Accordingly, claim 11 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 12 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 12 recites "a mixer operatively arranged before the discrete Fourier transform unit to effect a degradation of perceived signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited mixer to degrade signal quality. Accordingly, claim 12 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 13 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 13 recites

"the manipulation process includes band-pass filtering to suppress frequency contributions lying outside a selected frequency range to effect a degradation of perceived signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited band-pass filtering to degrade signal quality. Accordingly, claim 13 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 14 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 14 recites the manipulation process "inserts masked sound contributions adjacent the mixing frequency." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited insertion masked sound contributions adjacent the mixing frequency of to degrade signal quality. Accordingly, claim 14 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 15 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 15 recites "a frame manipulator operatively arranged to manipulate frames in the frame buffer to generate a degraded digital video signal." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited frame manipulation in a frame buffer to degrade signal quality. Accordingly, claim 15 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 16 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 16 recites the frame manipulator is operable "effect a degradation of perceived video signal quality" "according to frame type." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited frame manipulation according to frame type to degrade signal quality. Accordingly,

claim 16 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 17 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 17 recites the frame manipulator is operable "to vary the pixels of the data blocks of at least selected ones of the frames so as to effect a degradation of perceived video signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited varying pixels of data blocks to degrade signal quality. Accordingly, claim 17 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 18 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 18 recites the frame manipulator is operable "to vary the motion vectors of at least selected ones of the frames so as to effect a degradation of perceived video signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited varying motion vectors to degrade signal quality. Accordingly, claim 18 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 19 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 19 recites the frame manipulator is operable "to manipulate the objects of at least selected ones of the frames so as to effect a degradation of perceived video signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited manipulation of objects in selected frames to degrade signal quality. Accordingly, claim 19 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 20 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 20 recites the processing core switches "individual channels within the multi-

channel signal to apply spatial modification to the digital audio signal so as to effect a degradation of perceived digital audio signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited spatial modification of digital audio to degrade signal quality. Accordingly, claim 20 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 21 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 21 recites the processing core inverts "the phase of at least one of the audio channels so as to effect a degradation of perceived digital audio signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited phase inversion of an audio channel to degrade signal quality. Accordingly, claim 21 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 22 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 22 recites the processing core adds "together individual ones of the channels so as to effect a degradation of perceived digital audio/video signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited addition of channels to degrade signal quality. Accordingly, claim 22 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 23 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 23 recites the processing core operates "by removal or attenuation of at least one of the channels so as to effect a degradation of perceived digital audio/video signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited removal or attenuation of one channel to

degrade signal quality. Accordingly, claim 23 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 24 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 24 recites the processing core operates "to convert the n-bit digital audio signal into an m-bit digital audio signal where m is less than n so as to effect a degradation of perceived digital audio signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited conversion to fewer bits to degrade signal quality. Accordingly, claim 24 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 25 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 25 recites the processing core operates "to time modulate the digital audio/video signal so as to effect a degradation of perceived digital audio signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited time modulation to degrade signal quality. Accordingly, claim 25 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 26 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 26 recites this time modulation is "is one or more of: a speed-up or slow-down the digital audio/video signal; a change in the value of data bits in volume, luminance or chrominance data contained within the digital audio/video signal; and a lengthening of a sampling period of the digital audio/video signal." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited speed-up or slow-down, change in volume, luminance or chrominance data or lengthening of a sampling period of the digital audio/video signal to degrade signal quality.

Accordingly, claim 26 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 27 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 27 recites "an analog processing unit operable to apply a defined level of audio/video degradation to the analog signal creating a degraded analog audio signal having a degradation in perceived quality corresponding to said defined level of content degradation." Claim 28 recites the analog processing unit operates "to apply frequency domain modulation to an analog audio signal so as to effect a degradation of perceived audio signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited frequency domain modulation of an analog audio signal to degrade signal quality. Accordingly, claim 27 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 28 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 28 recites applying "frequency domain modulation to an analog audio signal so as to effect a degradation of perceived audio signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited frequency domain modulation of an analog signal to degrade signal quality. Accordingly, claim 28 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 29 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 29 recites "one or more of: band-reject filtering, low-pass filtering, high-pass filtering and frequency-selective phase inversion to effect a degradation of perceived signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited filtering to degrade signal quality.

Accordingly, claim 29 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 30 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 30 recites "a mixer for adding a secondary signal to the digital audio/video signal so as to effect a degradation of perceived digital audio/video signal quality." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited addition of a secondary signal to degrade signal quality. Accordingly, claim 30 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 31 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 31 recites "a signal generator for generating the secondary signal." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited signal generator for the added secondary signal to degrade signal quality. Accordingly, claim 31 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 32 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 32 recites the signal generator is "a noise generator." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited noise generator to degrade signal quality. Accordingly, claim 32 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 33 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 33 recites the signal generates operates "to generate a content-based audio signal." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited content-based audio signal to degrade signal quality. Accordingly, claim

33 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

Claim 34 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 34 recites "the level of the secondary signal mixed with the digital audio/video signal is determined by the degrade level signal." The citation of OFFICIAL NOTICE fails to indicate how the known digital signal processes make obvious the recited control of the level of the mixed secondary signal according to the degrade level to degrade signal quality. Accordingly, claim 34 is allowable over the combination of Kaplan and Shah-Nazaroff et al.

The Applicants respectfully submit that the Examiner's comments regarding the use of "standard digital processes in order to manipulate digital products" are not relevant. The OFFICE ACTION fails to point out where Kaplan and Shah-Nazaroff et al teach the use of "standard digital processes in order to manipulate digital products" in the manner recited in the claims. The Applicants respectfully submit that the use of "standard digital processes in order to manipulate digital products" in a manner not previously known is patentable. Particularly, the claims recite the processing is to effect degradation of the signal quality. The OFFICE ACTION fails to point out "standard digital processes" used to effect this claimed signal degradation. The Applicants agree that one skilled in the art would immediately recognize that using the techniques recited in the claims would degrade signal quality. The Applicants dispute that the known art teaches use of the techniques claimed for the purpose of degrading the signal quality. Accordingly, claims 6, 7, 9 to 34 are allowable over Kaplan and Shah-Nazaroff et al.

Claim 45 recites subject matter not made obvious by the combination of Kaplan and Shah-Nazaroff et al. Claim 45 recites "the dialogue unit being operable to supply a packet decoder to the

client over the network for decoding the digital video/audio signal" whereby the client can decode encrypted data packets transmitted from the server. Claim 45 further recites "the client input stage is configured to corrupt the decryption key of any given data packet before the decoded data of that packet is transmitted from the input stage in a form playable by the reproduction system." The Applicants respectfully submit that the combination of Kaplan, Shah-Nazaroff et al. and the known art fail to make obvious this subject matter. In particular, the OFFICE ACTION fails to point how the known art makes obvious an input stage configured to corrupt the decryption key as claimed. Accordingly, claim 45 is allowable over Kaplan and Shah-Nazaroff et al.

The Applicants respectfully submit that all the present claims are allowable for the reasons set forth above. Therefore early reconsideration and advance to issue are respectfully requested.

If the Examiner has any questions or other correspondence regarding this application, Applicants request that the Examiner contact Applicants' attorney at the below listed telephone number and address to facilitate prosecution.

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